

ABSTRACT OF THE DISCLOSURE

The semiconductor device comprises a p type Si substrate 10; a SiGe buffer layer 12 formed on the p type Si substrate 10 and having element isolation grooves 16 formed in the surface, which define an active region 18; a SiGe regrown buffer layer 20 formed on the SiGe buffer layer 12; a strained Si channel layer 22 formed on the side walls of the element isolation grooves 16 and on the SiGe regrown buffer layer 20 in the active region; a SiN film 24 formed on the strained Si channel layer 22 on the side walls of the element isolation grooves 16; and an element isolation insulation film 26 buried in the element isolation grooves.